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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 3

Complete if Known

Application Number	10/632,740
Filing Date	08/01/2003
First Named Inventor	Bellaiche, L.
Group Art Unit	1755
Examiner Name	
Attorney Docket Number	8793-52026

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T
G	CA	ABE, K., et al., Ferroelectric Properties in Epitaxially Grown $\text{Ba}_x\text{Sr}_{1-x}\text{TiO}_3$ Thin Films, J.Appl.Phys., Vol. 77, pp. 6461-6465, 15 June 1995.	
G	CB	UCHINO, K., Piezoelectric Actuators and Ultrasonic Motors, Kluwer Academic, Boston, 1996, pp. 1-11.	
G	CC	SAI, N., et al., Compositional Inversion Symmetry Breaking in Ferroelectric Perovskites, Phys.Rev.Lett., Vol. 84, pp. 5636-5639, 12 June 2000.	
G	CD	PARK, S-E., et al., Ultrahigh Strain and Piezoelectric Behavior in Relaxor Based Ferroelectric Single Crystal, J.Appl.Phys., Vol. 82, pp. 1804-1811, 15 August 1997.	
G	CE	SERVICE, R., Shape-changing Crystals Get Shiftier, Science, Vol. 275, pp. 1878-0, 28 March 1997, 3 pages.	
G	CF	NOHEDA, B., et al., A Monoclinic Ferroelectric Phase in the $\text{Pb}(\text{Zr}_{1-x}\text{Ti}_x)\text{O}_3$ Solid Solution, Appl.Phys.Lett., Vol. 74, pp. 2059-2061, 5 April 1999.	
G	CG	BELLAICHE, L., et al., Finite-temperature Properties of $\text{Pb}(\text{Zr}_{1-x}\text{Ti}_x)\text{O}_3$ Alloys from First Principles, Phys.Rev.Lett., Vol. 84, pp. 5427-5430, 5 June 2000.	
G	CH	HEMPHILL, R., et al., Finite-temperature Properties of Disordered and Ordered $\text{Pb}(\text{Sc}_{0.5}\text{Nb}_{0.5})\text{O}_3$ Alloys, Appl.Phys.Lett., Vol. 77, pp. 3642-3644, 27 November 2000.	
G	CI	HOHENBERG, P., et al., Inhomogeneous Electron Gas, Phys.Rev., Vol. 136, pp. B864-871, 9 November 1964.	
G	CJ	KOHN, W., et al., Self-consistent Equations Including Exchange and Correlation Effects, Phys.Rev., Vol. 140, pp. A1133-1138, 15 November 1965.	
G	CK	VANDERBILT, D., Soft Self-consistent Pseudopotentials in a Generalized Eigenvalue Formalism, Phys.Rev.B, Vol. 41, pp. 7892-7895, 15 April 1990.	
G	CL	BELLAICHE, L., et al., Virtual Crystal Approximation Revisited: Application to Dielectric and Piezoelectric Properties of Perovskites, Phys.Rev.B, Vol. 61, pp. 7877-7882, 15 March 2000.	

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B	CM	CHU, F., et al., Spontaneous (Zero-field) Relaxor-to-ferroelectric-phase Transition in Disordered Pb(Sc _{1/2} Nb _{1/2})O ₃ , J.Appl.Phys., Vol. 77, pp. 1671-1676, 15 February 1995.	
B	CN	VANDERBILT, D., et al., Monoclinic and Triclinic Phases in Higher-order Devonshire Theory, Phys.Rev.B, Vol. 63, pp. 094108-1 to 094108-9, 29 January 2001.	
B	CO	RAMER, N., et al., Application of a New Virtual Crystal Approach for the Study of Disordered Perovskites, J.Phys.Chem.Solids, Vol. 61, pp. 315-320, Elsevier Preprint, 14 June 1999, 14 pages.	
B	CP	FU, H., et al., Polarization Rotation Mechanism for Ultrahigh Electromechanical Response in Single Crystal Piezoelectrics, Nature, Vol. 403, pp. 281-282, 20 January 2000.	
B	CQ	BRAZIER, M., et al., Unconventional Hysteresis Behavior in Compositionally Graded Pb(Zr, Ti)O ₃ Thin Films, Appl.Phys.Lett., Vol. 72, pp. 1121-1123, 2 March 1998.	
B	CR	INIGUEZ GONZALES, J., Doctoral Dissertation, Calculos ab initio Hamiltonianos efectivos para el estudio de materiales ferroelectricos, Universidad del Pais Vasco, Spain, December 2000, 112 pages.	X
B	CS	GEORGE, A., Master's Thesis, Composition Modulation in Pb(Sc _{1/2} Nb _{1/2})O ₃ (PSN), University of Arkansas, Fayetteville, Arkansas, December 2001, 43 pages.	
B	CT	BELLAICHE, L., Abstract, Finite-Temperature Properties of Ferroelectric Alloys from First Principles, Meeting of the American Physical Society, Seattle, Washington, March 12-16, 2001, 1 page.	
B	CU	BELLAICHE, L. et al., Abstract, Composition Modulation in Pb(Sc, Nb)O ₃ Alloys, Fundamental Physics of Ferroelectrics 2001, Williamsburg, Virginia, February 4-7, 2001, Proceedings published in AIP Conference Proceedings, 2 pages.	
B	CV	Website, http://advancement.uark.edu , Researchers Discover Optimal Energy State that Underlies Ultrasound, Radar Devices, September 5, 2001, 3 pages.	
B	CW	Website, http://advancement.uark.edu , University of Arkansas Research Frontiers-Optimal Energy States, Spring 2002, printed from website July 24, 2002, 2 pages.	
B	CX	BLOUIN, M., Science of the Small, University of Arkansas Research Frontiers, Fayetteville, Arkansas, Spring 2002, pp. 14-15.	

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O	CY	GEORGE, A., et al., Anomalous Properties in Ferroelectrics Induced by Atomic Ordering, Nature, Vol. 413, pp. 54-57, 6 September 2001.	
O	CZ	INIGUEZ, J., et al., Ab Initio Design of Perovskite Alloys with Predetermined Properties: The Case of Pb(Sc _{0.5} Nb _{0.5})O ₃ , Physical Review Letters, Vol. 87, 27 August 2001, pp. 095503-1 to 095503-4.	
O	DA	GEORGE, A., et al., Composition Modulation Away from the Polar Direction in Pb(Sc, Nb)O ₃ Alloys, Physical Review B, Vol. 64, 18 July 2001, pp. 060102-1 to 060102-4.	
O	DB	New Release, Weird Energy: Physicists Uncover Unusual Properties in Ferroelectric Superlattices, University of Arkansas, Fayetteville Arkansas, August 28, 2003, 2 pages.	
O	DC	KORNEV, I., et al., Unusual Thermodynamic Properties and Nonergodicity in Ferroelectric Superlattices, Physical Review Letters, Vol. 91, September 12, 2003, pp. 116103-1—116103-4.	
O	DD	Other Information, Oral Presentation, Finite-Temperature Properties of Ferroelectric Alloys from First-Principles, American Physical Society, Seattle Washington, March 12-16, 2001.	
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O	DF	AL-BARAKATY, A., et al., Global and Secondary Ferroelectric Minima in Ordered Pb(Sc _{0.25} Nb _{0.25} Ti _{0.5})O ₃ Alloys, Applied Physics Letters, Vol. 81, September 23, 2002, pp. 2442-2444.	
	DG	Other Information, Citations identified as especially pertinent.	

Examiner Signature		Date Considered	8/25/04
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U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

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